



FOX DATADIODE for Industrial Control Systems

Industrial Control Systems (ICS) make sure power comes out of the sockets and factories run smoothly. Society heavily depends on the correct and uninterrupted functioning of these systems. In essence ICS are just computers, with all their flaws and benefits. Industry has come to depend upon the many benefits industrial automation offers such as real-time planning, billing and supply chain management. This increase in connectivity has opened the door for abuse of critical infrastructures by people with malicious intent. The only effective way has been to disconnect critical systems. FOX IT now offers the FOX DATADIODE, a one-way data valve for your network. This allows you to enjoy the benefits of business integration while preventing all cyber attacks directed at your critical infrastructure.



DATADIODE
BY FOX IT

- Guaranteed unidirectional connection to secure against cyber attacks.
- The FOX DATADIODE reconciles two seemingly incompatible requirements in critical infrastructure environments: high levels of security and connectivity.
- Extensive protocol support for ICS like DNP3, Modbus, OPC and ICCP among others.
- The Fox DataDiode has been granted numerous certifications such as Common Criteria EAL7+ and NATO SECRET and is trusted by governments world-wide.

What are the current threats to ICS?

Modern multi-staged attacks hop from one network to the next by any means, both by network and by storage device. Every connected system risks being compromised. At the same time, business requires increased levels of integration with industrial automation. Industrial Control Systems are targeted by well-funded adversaries that want to cripple society. Often, attacks remain active and undetected for months or even years, as the Stuxnet attack clearly illustrates.

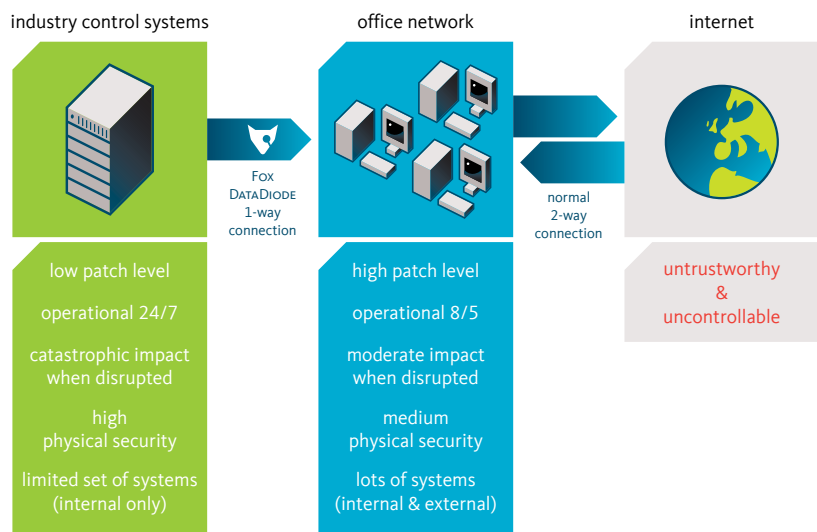
How does the FOX DATADIODE work?

At the heart of the FOX DATADIODE solution lies the hardware DataDiode. This network device enforces 1-way traffic on a particular connection. The unidirectional property is assured on the physical layer only, leaving no room for mistakes or misconfigurations, intentional or accidental. The challenge is that almost all protocols require two-way communication. Therefore the Fox DataDiode is equipped with proxies that convert all sorts of network traffic in a proprietary, reliable unidirectional protocol and vice-versa.

For example, Modbus, DNP3, IEC or OPC data is received by the proxy on the ICS-network, transmitted to the proxy on the corporate network where it is propagated or made available. In this way the Fox DataDiode integrates transparently in your infrastructure while providing unsurpassed levels of security.

How do Industrial Control Systems benefit from the FOX DATADIODE?

Two types of networks are commonly found in critical infrastructure scenarios: the Industrial Control Systems (ICS) network and the corporate network. These networks have opposing properties:



Fox IT prevents, solves and mitigates the most serious cyber threats with innovative solutions for government, defense, law enforcement, critical infrastructure, banking, and commercial enterprise clients worldwide. Our approach combines human intelligence and technology into innovative solutions that ensure a more secure society. We develop custom and packaged solutions that maintain the security of sensitive government systems, protect industrial control networks, defend online banking systems, and secure highly confidential data and networks.

Disruption of your Industrial Control Systems puts you out of business or worse. At the same time, connecting Industrial Control Systems and Office networks is necessary for business reasons. The inherent capability of 2-way connectivity opens the door for cyber attacks on your critical infrastructure. A 1-way connection guarantees protection against attacks while facilitating the availability of your Industrial Control System data in your Office network.

Next steps

Using the FOX DATADIODE you have the best of both worlds: protection and connectivity. Please contact your local reseller or Fox IT directly to discuss the options for your particular situation.

for a more secure society